

MICROMYCETES FROM THE BEQUEST OF J. BÁNHEGYI

by

L. ZELLER—S. TÓTH*

Experimental Station of the Eötvös Loránd University, Göd
and * Department of Botany, University of Agriculture, Gödöllő

Received: 19.04.1982

In one of the previous tomi of this Annales we have communicated a paper about *Myxomycetes* from the bequest of our late professor, J. Bánhegyi. In continuation, the present paper enumerates 85 species and 122 occurrences of *Myxomycetes*, *Phycomycetes*, *Uredinales*, *Ustilaginales*, and *Fungi imperfecti*.

Myxomycetes

Arcyria denudata (L.) Wettst.

11262. On dead wood. Fáni-völgy near Vérteskozma, Vértes Mountains, 10.7.1949.

Badhamia obovata (Peck) J. S. Smith

11286. On ground and on dead plants. Kukojszás near Szent-Anna-tó, Transylvania, 6.9.1942. Plasmodium yellow, sporangium with conspicuous columella.

Ceratiomyxa fruticulosa (Müll.) Macbr.

11271. On rotting wood. Órház-völgy near Nagymaros, Börzsöny Mountains, 18.5.1963.

Comatricha aequalis Peck

11241. On dead stump. Near Piliske-tető by Zalánpaták, Comit. Háromszék, Transylvania, 17.7.1943. Spores 7.5–10 μ m.

Diachea leucopodia (Bull.) Rost.

11245. On rotting leaves (*Fagus sylvatica* L. and *Carpinus betulus* L.). By Tizenegy-vályús-forrás near Zebegény, Börzsöny Mountains, 11.6.1950. — 11293. On rotting leaves. Kamara-erdő by Budaörs near Budapest, 4.6.1939.

Dictydium cancellatum (Batsch) Macbr.

11159. On rotting wood. Mohos-tó near Szent-Anna-tó, Transylvania, 8.7.1943. — 11266. On dead wood. Fáni-völgy near Vérteskozma, Vértes Mountains, 10.7.1949.

Diderma niveum (Rost.) Macbr.

11281. On rotting leaves of *Quercus* sp. Kamara-erdő by Budaörs near Budapest, 4.6.1939.

Diderma radiatum (L.) Morgan

11278. On dead wood. Monasztikra near Gorkiy (formerly Nizhniy Novgorod), USSR, 1.7.1946.

Diderma testaceum (Schrad.) Pers.

11287. On rotting leaves and dead twigs of *Quercus* sp. Kamara-erdő by Budaörs near Budapest, 4.6.1939.

Didymium crustaceum Fr.

11427. On rotting pine-needles of *Pinus nigra* Arn. János-hegy, Budapest, 25. IX. 1938.

Fuligo septica (L.) Wigg.

11199. On dead wood of *Populus* sp. Near Csévharaszt, Comit. Pest, 14.5.1963.

Leocarpus fragilis (Dickson) Rost.

11151. Among Musci and on dead plants. Mt. Pisznice near Pusztamarót, Gerecse Mountains, 24.6.1951.

Lycogala epidendrum (L.) Fr.

11243. On dead wood. Oranki near Gorkiy (formerly Nizhniy Novgorod), USSR, 10.9.1945. — 11274. On dead wood. Near Piliske-tető by Zalánpatak, Comit. Háromszék, Transylvania, 17.7.1943.

Metatrichia vesparium (Batsch) Nann.-Brem.

11261. On dead wood. Oranki near Gorkiy (formerly Nizhniy Novgorod), USSR, 30.12.1945.

Mucilago crustacea Wigg.

11238. On dead parts of *Gramineae*. Near Gödöllő, Comit. Pest, 2.10.1949.

Physarum bivalve Pers.

11163. On rotting leaves. Lukácsárok near Dömös, Visegrádi Mountains, 21.9.1949.

Physarum nutans Pers.

11818/a. On dead wood. Mt. Korongyis near Radnaborberek, Comit. Beszterce-Naszód, 22.6.1941.

Stemonitis flavogenita Jahn

11282. On Musci and other living plants. Fáni-völgy near Vérteskozma, Vértes Mountains, 17.8.1940.

Stemonitis fusca Roth

11270. On rotting leaves of *Quercus* sp. Hársbokorhegy by Budakeszi near Budapest, 29.5.1952. — 11280. On dead wood. Near Göd, Comit. Pest, 27.5.1948. — 11283. On dead wood. Nagymaros, Börzsöny Mountains 30.6.1963.

Trichia favoginea (Batsch) Pers.

11268. On dead stump of *Picea abies* (L.) Karst. Mt. Nagy-Csomád near Tusnádfürdő, Transylvania, 8.7.1943. — 11265. On rotting wood.

Piliske-tető near Zalánpatak, Comit. Háromszék, Transylvania, 17.7.1943. — 11260. On dead wood. Nagy-Csomád near Tusnádfürdő, Transylvania, 13.7.1943.

Trichia scabra Rost.

11162. On dead wood. By Keskenybükki-patak near Magyarkút, Börzsöny Mountains, 7.9.1952. — 11192. On dead wood of *Fagus sylvatica* L. By Szent-Anna-tó near Tusnádfürdő, Transylvania, 8.7.1943. — 11610. On dead wood. Piliske-tető near Zalánpatak, Comit. Háromszék, Transylvania, 11.7.1943.

Trichia varia (Pers.) Pers.

11246. On rotting bark. Oranki near Gorkiy (formerly Nizhniy Novgorod), USSR, 30.12.1945. — 11288. On dead wood. Lukácsárók near Dömös, Visegrádi Mountains, 28.9.1949.

Tubifera ferruginosa (Batsch) J. F. Gmel.

11264. On rotting bark of *Fagus sylvatica* L. Mt. Csomád near Bükszád, Transylvania, 16.7.1943. — 11272. On dead wood. Near Tusnádfürdő, Transylvania, 16.7.1943.

Phycomycetes

Peronospora dentariae Rabenh.

11512. *Dentaria bulbifera* L. In Máriaszakadék near Szár, Vértes Mountains, 8.5.1951.

Plasmopara pygmaea (Ung.) Schröt.

11518. *Anemone ranunculoides* L. Fáni-völgy near Vérteskozma, Vértes Mountains, 27.4.1952.

Plasmopara umbelliferarum (Casp.) Schröt. ex Wartenw.

11500. *Aegopodium podagraria* L. Fáni-völgy near Vérteskozma, Vértes Mountains, 27.4.1952.

Uredinales

Cronartium gentianeum Thüm.

11438. *Gentiana asclepiadea* L. Horgászhegy near Kovászna, Transylvania, 31.8.1942.

Gymnosporangium clavariaeforme (Jacq.) DC.

10964. *Crataegus oxyacantha* L. (on fruits). Near Tapolca, Comit. Veszprém, 25.6.1948. — 11303. *Crataegus monogyna* Jacq. (on leaves). Near Csévharaszt, Comit. Pest, 18.6.1969.

Hyalospora polypodii (Pers.) Magn.

11369. *Cystopteris fragilis* (L.) Bernh. Fáni-völgy near Vérteskozma, Vértes Mountains, 27.4.1952.

Puccinia adoxae Hedw. f.

11448. *Adoxa moschatellina* L. Fáni-völgy near Vérteskozma, Vértes Mountains, 24.4.1951.

Puccinia aegopodii (Schum.) Mart.

11309. *Aegopodium podagraria* L. Gaja-szurdok near Bodajk, Bakony Mountains, 14.5.1941. — 11503. *Aegopodium podagraria* L. Fáni-völgy near Vérteskozma, Vértes Mountains, 27.4.1952.

Puccinia antirrhini Diet. et Holw.

11324. *Antirrhinum majus* L. Hortus Botanicus Universitatis Sci. Budapest, 14.10.1948.

Puccinia asarina Kunze

11360. *Asarum europaeum* L. Kis-Csomád near Tusnád, Comit. Csík, Transylvania, 26.8.1942.

Puccinia bupleuri-falcati (DC.) Wint.

11382. *Bupleurum pachnospermum* Panč. Budakalász near Budapest, 14. 6.1959.

Puccinia centaureae DC.

11381. *Centaurea sadleriana* Janka Ezüsthegy by Budakalász near Budapest, 30.9.1950. — 11366. *Centaurea pannonica* (Heuff.) Simk. Near Balatonföldvár, Comit. Somogy, 13.9.1952.

Puccinia cirsii Lasch

11315. *Cirsium canum* (L.) M.B. On riverside of the Olt near Tusnád, Transylvania, 5.9.1942.

Puccinia coronata Corda

11358. *Avena saliva* L. Réty, Comit. Háromszék, Transylvania, 28.8.1942.

Puccinia dictyoderma Lindroth

11378. *Smyrniolum perfoliatum* L. Fáni-völgy near Vérteskozma, Vértes Mountains, 27.4.1952.

Puccinia dispersa Erikss.

11328. *Seclale silvestre* Host Near Csévharaszt, Comit. Pest, 18.6.1969.

Puccinia genetianae (Strauss) Mart.

11362. *Gentiana cruciata* L. Kis-Csomád near Tusnád, Transylvania, 26.8.1942.

Puccinia glumarum (Schmidt) Erikss. et Henn.

11440. *Hordeum distichon* L. Near Réty, Comit. Háromszék, Transylvania 28.8.1942.

Puccinia graminis Pers.

11468 and 11511. *Hordeum distichon* L. Near Réty, Comit. Háromszék, 28.8.1942. — 11304. *Poa pratensis* L. Hűvösvölgy, Budapest, 19.10.1948. — 10980. *Phragmites communis* Trin. Near Aszófő, Comit. Veszprém, 5.4.1952.

Puccinia helianthi Schweinitz

11490. *Helianthus annuus* L. Near Réty, Comit. Háromszék, Transylvania, 28.8.1942. — 11318. *Helianthus annuus* L. Near Tiszafüred, Comit. Szolnok, 8.9.1948. — 11258. *Helianthus annuus* L. Near Zebegény, Börzsöny Mountains, 5.8.1949. — 11333. *Helianthus annuus* L. Near Szár, Comit. Fejér, 24.9.1949.

Puccinia liliacearum Duby

11312. *Muscari racemosum* (L.) Lam. et DC. Near Vérteskozma 24.4.1951. — 11385. *Muscaria racemosum* (L.) Lam. et DC. Fáni-völgy near Vérteskozma, Vértes Mountains, 24.4.1951.

Puccinia magnusiana Körn.

11306. *Phragmites communis* Trin. On shore of Lake Balaton near Balatonlelle, Comit. Somogy, 26.9.1969.

Puccinia malvacearum Bertel.

11327. *Malva neglecta* Wallr. Nagymaros, Comit. Pest, 22.6.1969.

Puccinia poarum Niels.

11540. *Tussilago farfara* L. On riverside of the Olt near Tusnád, Transylvania, 27.8.1942. — 11340. *Tussilago farfara* L. On riverside of the Olt near Tusnád, Transylvania, 5.9.1942.

Puccinia punctata Link

11313. *Galium schultesii* Vest. Húvösvölgy, Budapest, 20.8.1948.

Puccinia salviae Unger

11502. *Salvia glutinosa* L. Patkoló-patak near Kovászna, Comit. Háromszék, Transylvania, 31.8.1942.

Puccinia sorghi Schweinitz

11341. *Zea mays* L. Near Réty, Comit. Háromszék, Transylvania, 30.8.1942. — 11361. *Zea mays* L. Near Gödöllő, Comit. Pest, 12.10.1949.

Puccinia suaveolens (Pers.) Rostr.

11493. *Cirsium arvense* (L.) Scop. Near Réty, Comit. Háromszék, Transylvania, 28.8.1942.

Puccinia trailii Plovr.

11379. *Phragmites communis* Trin. Near Balatonföldvár, Comit. Somogy, 13.9.1952.

Tranzschelia pruni-spinosae (Pers.) Diet.

11566. *Prunus domestica* L. Kovászna, Comit. Háromszék, Transylvania, 3.9.1942. — 11336. *Prunus spinosa* L. Irhásárok, Budapest, 14.9.1950. — 11510. *Prunus* sp. Irhásárok, Budapest, 14.9.1950. — 11359. *Anemone ranunculoides* L. Fáni-völgy near Vérteskozma, Vértes Mountains, 27.4.1952.

Uromyces ficariae (Schum.) Lé v.

11380. *Ficaria verna* Huds. Fáni-völgy near Vérteskozma, Vértes Mountains, 24.4.1951. — 11384. *Ficaria verna* Huds. Fáni-völgy near Vérteskozma, 27.4.1952.

Uromyces phaseoli (Pers.) Diet.

11337. *Phaseolus vulgaris* L. Réty, Comit. Háromszék, Transylvania, 28.8.1942.

Uromyces pisi (Pers.) Wint.

11307. *Pisum sativum* L. Réty, Comit. Háromszék, Transylvania, 28.8.1942. — 11311. *Pisum sativum* L. Alsópetény, Comit. Nógrád, 12.7.1948. — 11331. *Lathyrus tuberosus* L. Ezüsthegy by Budakalász near Budapest, 30.9.1950.

Uromyces polygoni (Pers.) Fuck.

11383. *Polygonum aviculare* L. Budakalász near Budapest, 14.6.1951.

Uromyces sceutellatus (Pers.) Lé v.

11339. *Euphorbia cyparissias* L. Mt. Bükkavas by Vitányvár near Tatabánya, Vértes Mountains, 8.5.1951.

Uromyces tinctoriicola Magnus

11376. *Euphorbia pannonica* Host Szár. Comit. Fejér, 27.4.1952.

Uromyces verbasci Niessl

11319. *Verbascum phlomoides* L. Near Zebegény, Börzsöny Mountains, 11.6.1950.

Ustilaginales

Entyloma corydalis de Bary

11492. *Corydalis cava* (L.) Schweigg. et Koerte Fáni-völgy near Vétreskozma, Vértes Mountains, 27.4.1952.

Entyloma ficariae Fisch. v. Waldheim

11477. *Ficaria verna* Huds. Mt. Oszoly near Csobánka, Comit. Pest, 30.4.1951. — 11415. *Ficaria verna* Huds. Aszófői-völgy near Aszófő, Comit. Veszprém, 5.4.1952.

Tilletia laevis Kühn. ap. Rabenh.

11486. *Triticum aestivum* L. em. Fiori et Paol. Alsópetény, Comit. Nógrád, 12.7.1948. — 11474. *Triticum aestivum* L. em. Fiori et Paol. Aquincum, Budapest, 24.7.1950.

Ustilago bullata Berk.

11507. *Bromus sterilis* L. Gellérthegey, Budapest, 20.5.1951.

Ustilago crameri Körn.

11284. *Setaria italica* (L.) R. et Sch. Szár. Comit. Fejér, 24.9.1949.

Ustilago neglecta Niessl

11506. *Setaria lutescens* (Weigel) Hubbard Hármashatár-hegy, Budapest, 8.8.1950.

Ustilago segetum (Pers.) Rouss. var. *avanae* (Pers.) Brun.

11534. *Avena sativa* L. Alsópetény, Comit. Nógrád, 8.7.1948. — 11479. *Avena sativa* L. Alsópetény, Comit. Nógrád, 8.7.1949. — 11481. *Avena sativa* L. Pesthidegkút near Budapest, 7.7.1951.

Ustilago segetum (Pers.) Rouss. var. *hordei* (Pers.) Rabenh.

11513. *Hordeum distichon* L. Alsópetény, Comit. Nógrád, 12.7.1948. — 11517. *Hordeum distichon* L. Budaörs near Budapest, 19.6.1949. — 11499. *Hordeum vulgare* L. Zebegény, Börzsöny Mountains, 11.6.1950.

Ustilago sorghi Pass. ap. Thümen

11505. *Sorghum bicolor* (L.) Mönch. Hortus Botanicus Univ. Sci., Budapest, 14.10.1948.

Fungi imperfecti

Acrogenospora sphaerocephala (B. et Br.) M. B. Ellis

11012. *Fagus silvatica* L. (on dead wood) By Haus Bruneck, Kreuth, Bayern, W. Germany, 16.8.1973.

Ascochyta desmazierii Cav.

11532. *Hordeum distichon* L. Réty, Comit. Háromszék, Transylvania, 28.8.1942.

Ascochyta zeina Sacc.

11401. *Zea mays* L. (on dead leaves) Gödöllő, Comit. Pest, 12.10.1949.

Bactridium flavum Kunze

11018. *Fagus sylvatica* L. (on dead wood) By Haus Bruneck, Kreuth, Bayern, W. Germany, 16.8.1973. (conidia 4-septate, $205-214 \times 51-56 \mu\text{m}$)

Bispora antennata (Pers. ex Pers.) Mason

10957. *Fagus sylvatica* L. (on dead wood) Near Mátraszentimre, Mátta Mountains, 27.7.1959.

Brachysporiella setosa (Berk. et Curt.) M. B. Ellis

11037. On dead wood. Near Kreuth, Bayern, W. Germany, 20. 8.1970. (conidia subglobose, atra, pro ratione lata, $39 \times 30 \mu\text{m}$, subtus $6 \mu\text{m}$ lata)

Brachysporium obovatum (Berk.) Sacc.

11239. On dead wood. Zarany-erdő near Kaposvár, Comit. Somogy, 2.5.1937.

Cercospora microsora Sacc.

11509. *Tilia* sp. (on leaves) Near Zebegény, Börzsöny-Mountains, 11.6.1950.

Discella strobiligena (Desm.) Died.

11789. *Picea abies* (L.) Karst. (on squamae of dead strobili) Kiscsomád near Tusnádfürdő, Transylvania, 24.6.1943. (conidia 1-septate, $10,5-14,3 \times 2,7-3 \mu\text{m}$)

Haplographium delicatum Berk. et Br.

11818/b. On dead wood. Mt. Korongyis near Radnaborberek, Comit. Beszterce-Naszód, 22.6.1941.

Marssonina delastrei (De Lacer.) Magn.

11452. *Silene armeria* L. By Rétyi-Nyir near Réty, Comit. Háromszék, Transylvania, 30.8.1942. (conidia 1-septate, $15-21,8 \times 4,5-5,3 \mu\text{m}$)

Menispora ciliata Corda

11038. *Quercus* sp. (on dead cupules) Near Csévharaszt, Comit. Pest, 10.10.1963.

Sepedonium chrysospermum (Bull.) Link ex Fr.

11045. On *Xerocomus subtomentosus* (L. ex Fr.) Quél. Near Csévharaszt, Comit. Pest, 21.8.1963.

Spadicoides grovei M. B. Ellis

11838. On dead wood. By Haus Bruneck, Kreuth, Bayern, W. Germany 14.8.1973. (conidia 3-septate, $19,5-25,2 \times 9-13,2 \mu\text{m}$)

Stachybotrys atra Corda

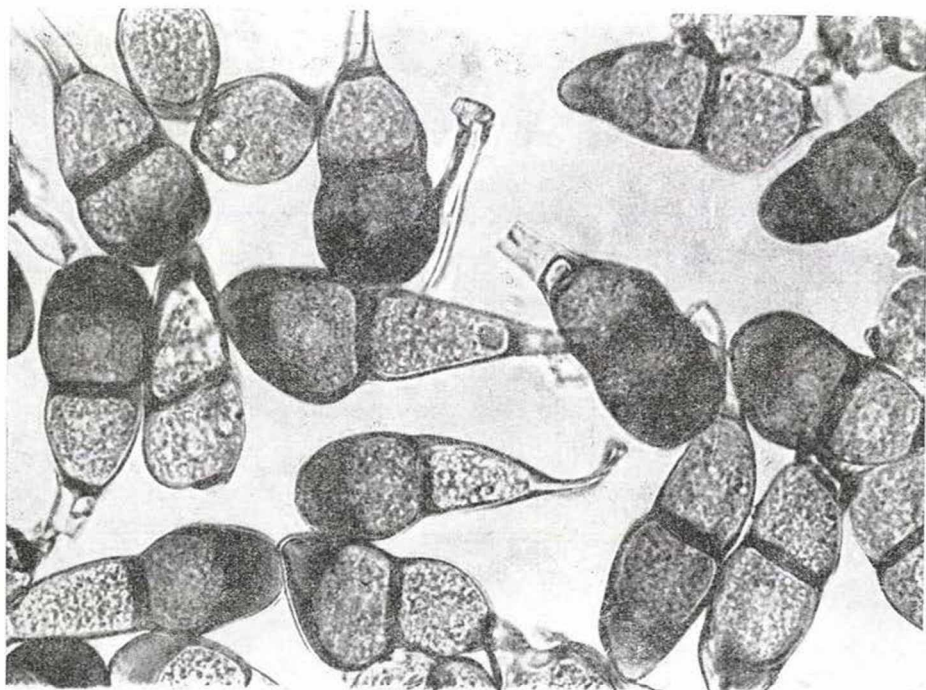
11585/b. On cattle-dung. Near Kovászna, Comit. Háromszék, Transylvania, 1.9.1942. (cult. in lab.: 1980.)

Stephanoma strigosum Wallr.

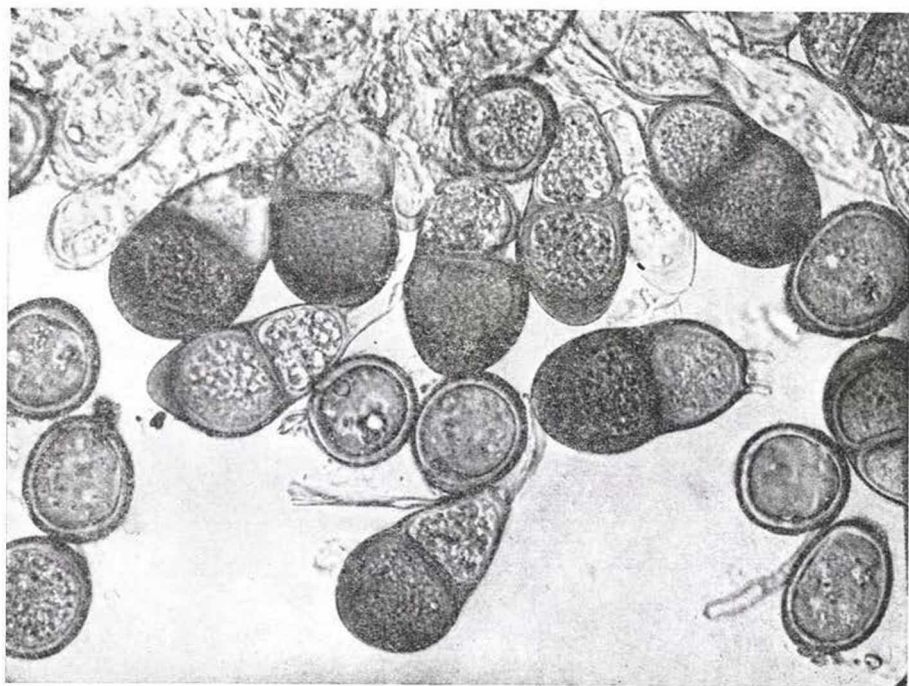
11022/b. On *Humaria hemisphaerica* (Wigg. ex Fr.) Near Csévharaszt, Comit. Pest, 10.10.1963.

Tubercularia vulgaris Tode

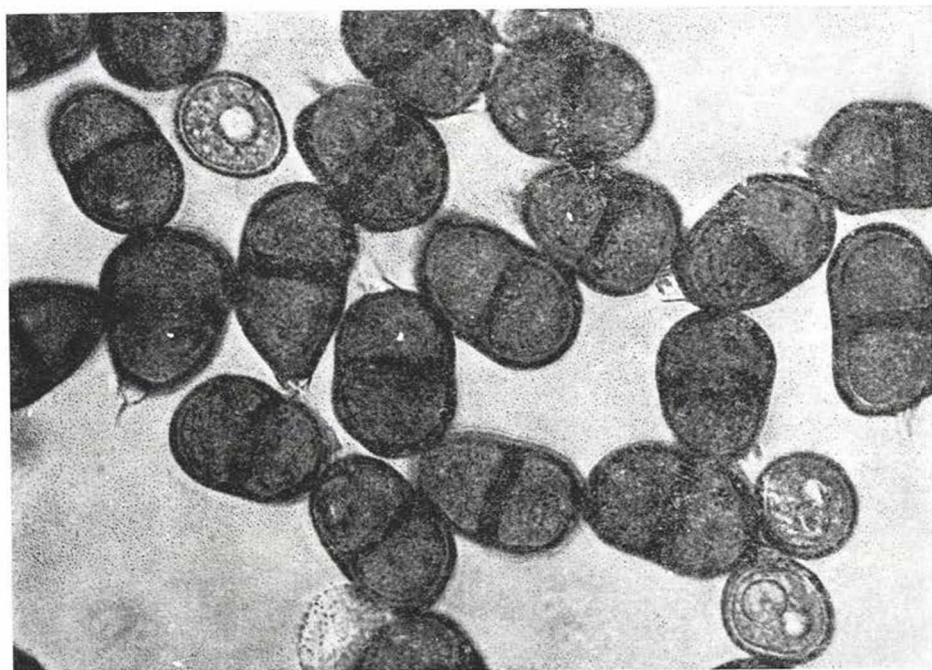
11014. On dead twigs. Near Csévharaszt, Comit. Pest, 10.10.1963.



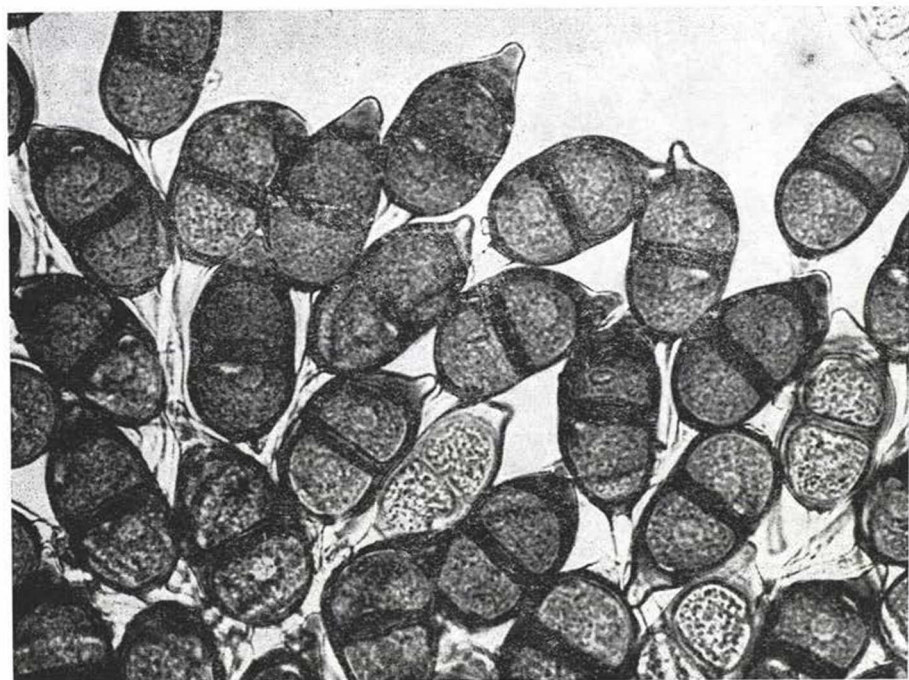
1. *Puccinia punctata* Link teliospores



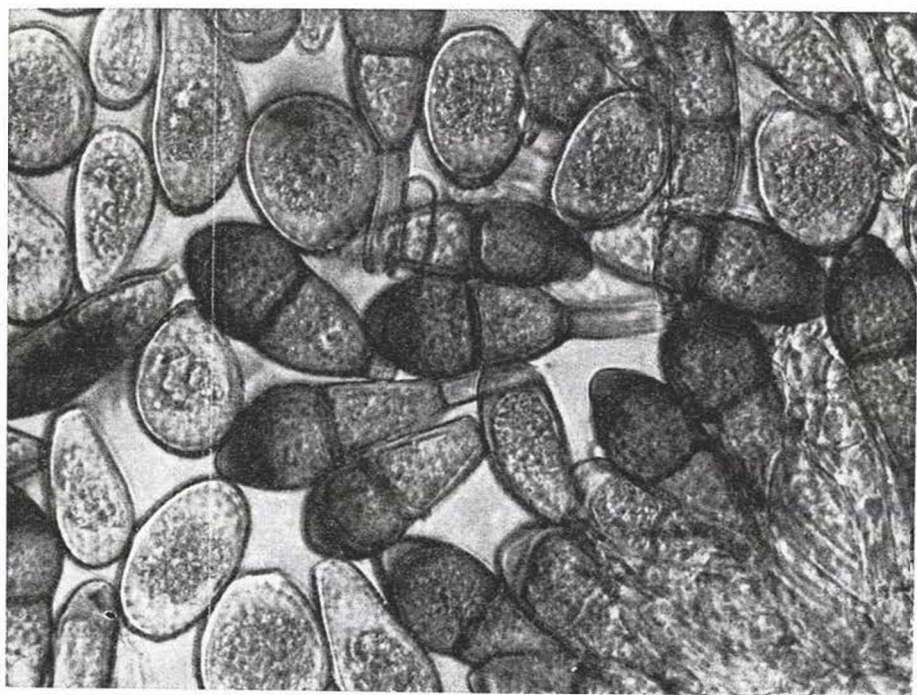
2. *Puccinia antirrhini* Diet. et Holw. uredio- and teliospores



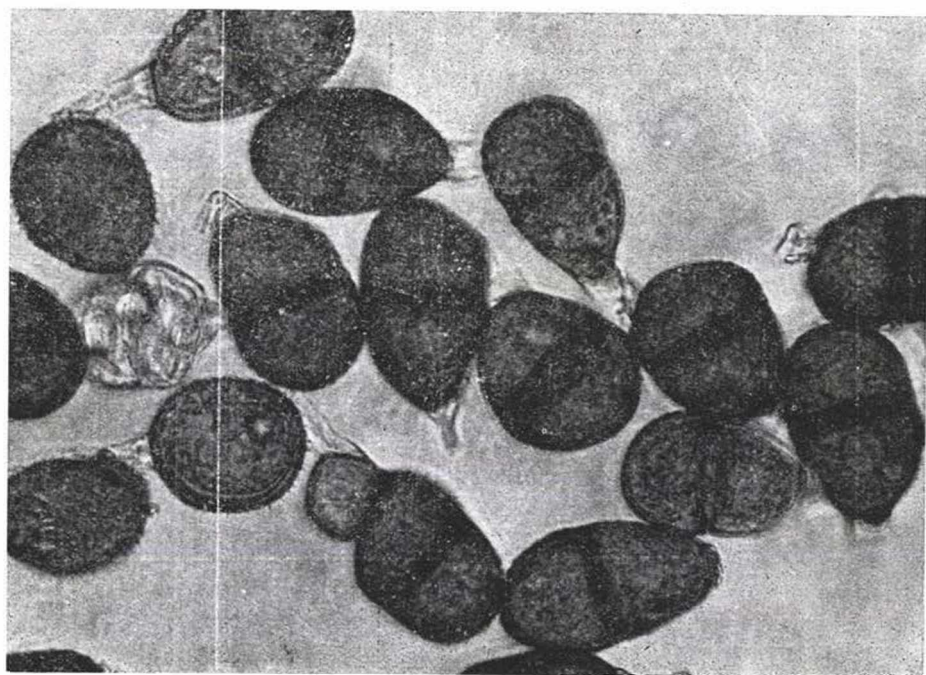
3. *Puccinia bupleuri-falcati* (D C.) Wint. uredio- and teliospores



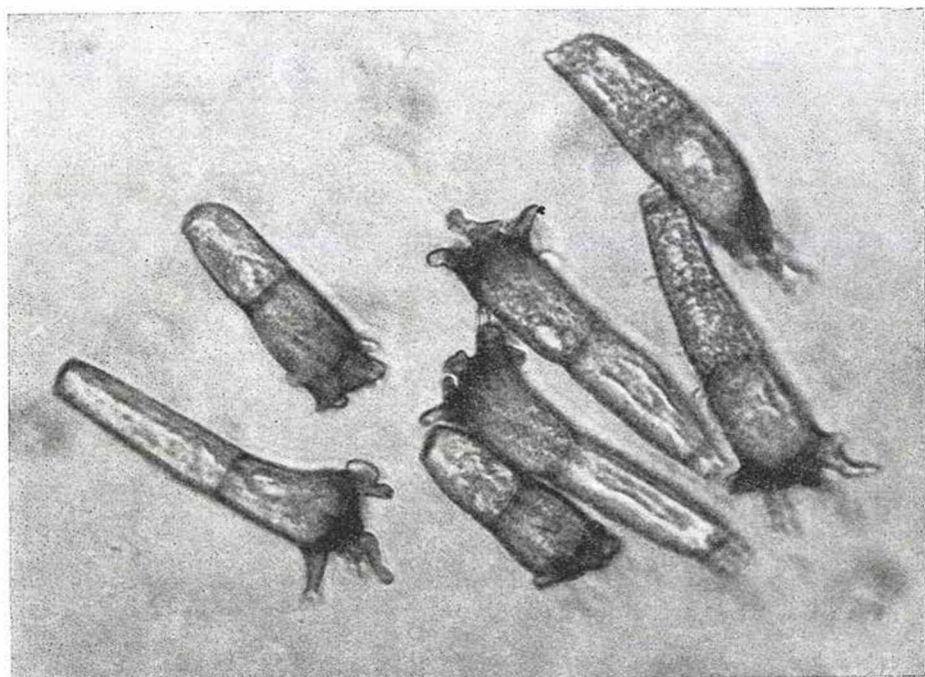
4. *Puccinia salviae* Unger teliospores



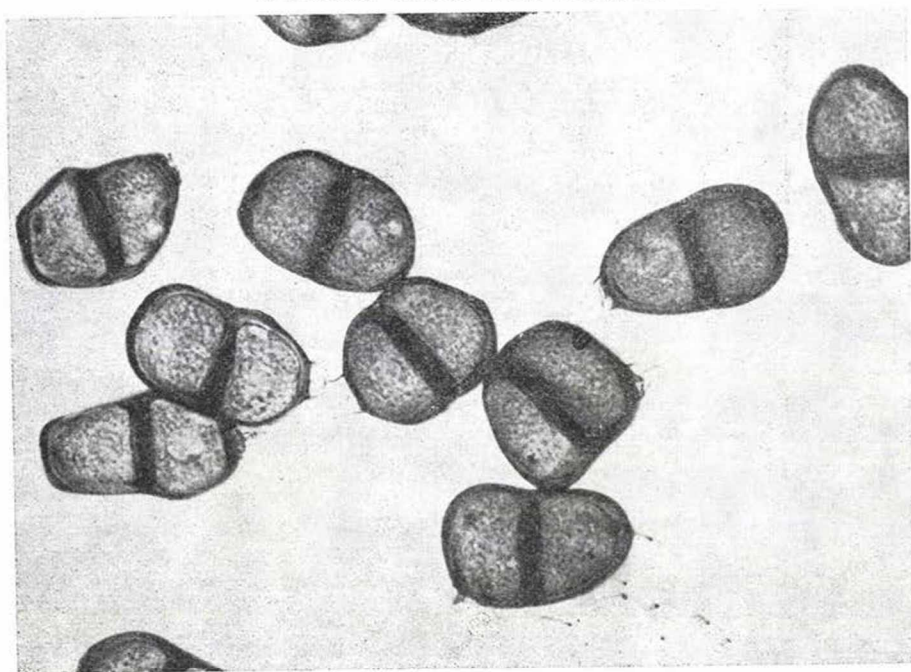
5. *Puccinia graminis* Per s. uredio- and teliospores



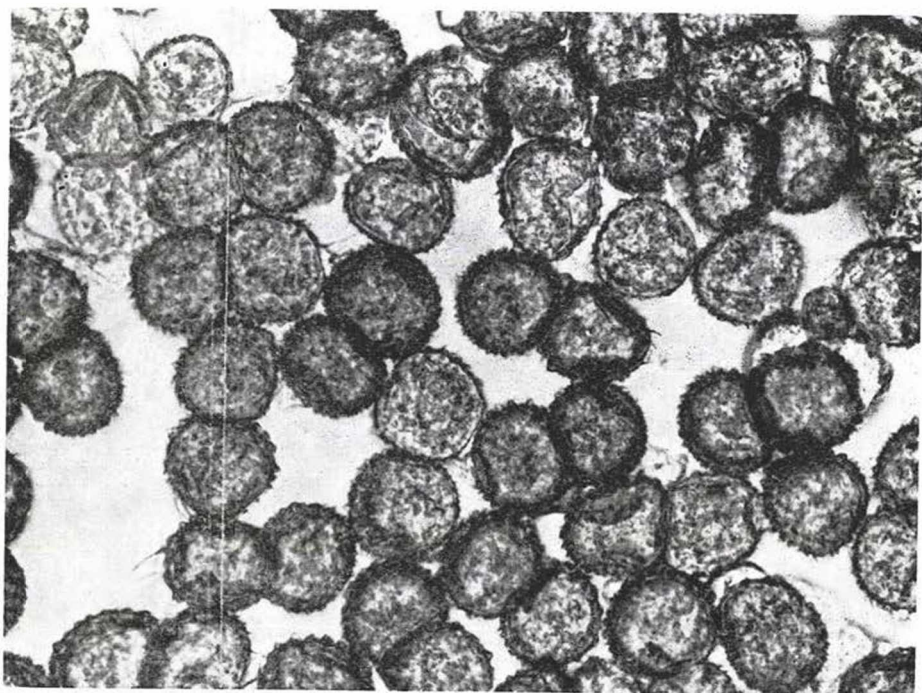
6. *Puccinia centaureae* D C. teliospores



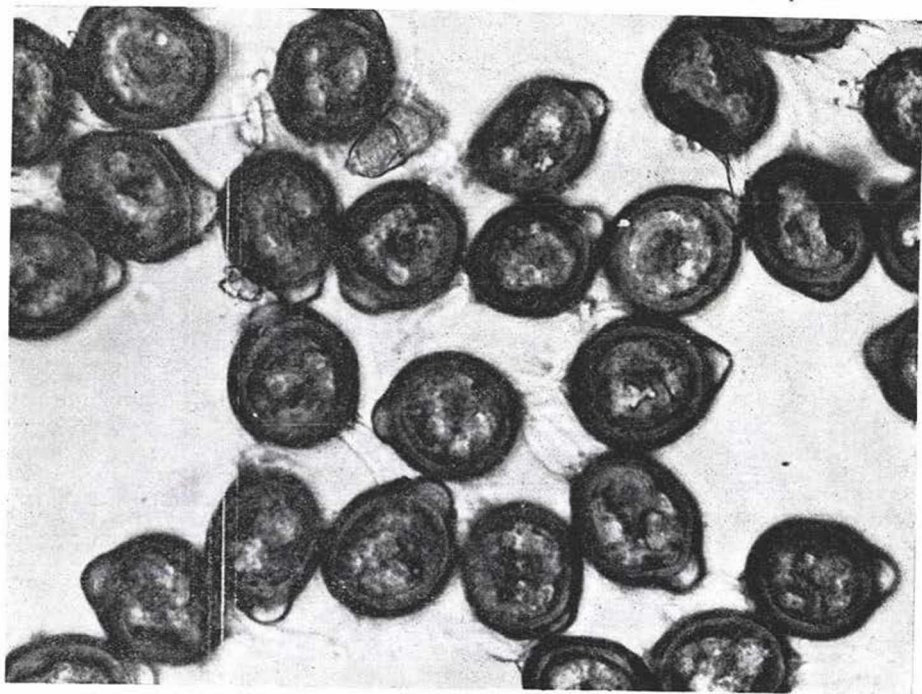
7. *Puccinia coronata* C d a. teliospores



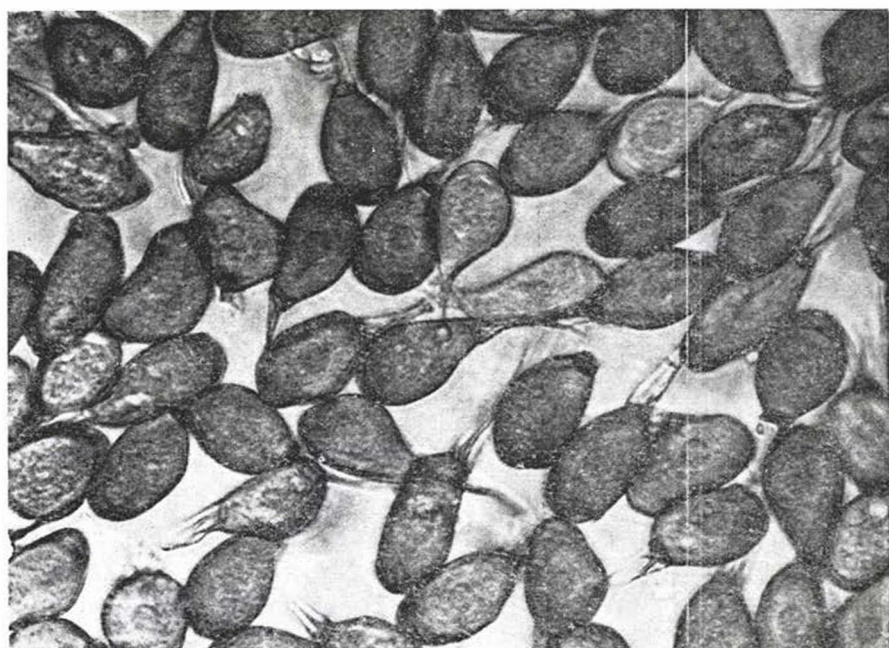
8. *Puccinia cirsii* L a s c h teliospores



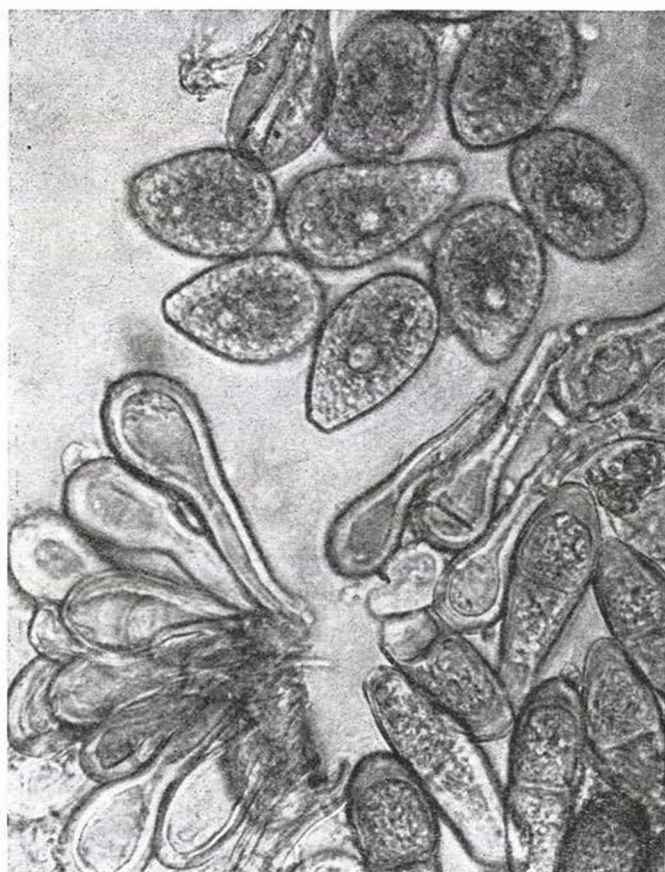
9. *Tranzschelia pruni-spinosae* (Pers.) Diet. uredio- and teliospores



10. *Uromyces phaseoli* (Pers.) Diet. teliospores



11. *Uromyces verbasici* Niessl teliospores



12. *Puccinia magnusiana* K ö r n. urediospores with paraphyses and teliospores

REFERENCES

- Allescher, A. 1901. Fungi imperfecti: Hyalinsporige Sphaeroideen (in RBH's Kr. - Fl.: Die Pilze, VI. Abt.) 1016 p. Leipzig.
- Allescher, A. 1903. Fungi imperfecti: Gefärbt-sporige Sphaeroideen (in RBH's Kr. - Fl.: Die Pilze, VII. Abt.) 1072 p. Leipzig.
- Arx, J. A. von 1957. Revision der zu Gloeosporium gestellten Pilze 153 p. Amsterdam.
- Arx, J. A. von 1970. The genera of fungi sporulating in pure culture 258 p. Lehre.
- Diedicke, H. 1915. Sphaeropsidae, Melanconieae (in Kryptogamenflora d.M. Brandenb.: Pilze VII.) 962 p. Leipzig.
- Ellis, M. B. 1971. Dematiaceous Hyphomycetes 608 p. Kew.
- Ellis, M. B. 1976. More dematiaceous Hyphomycetes 507 p. Kew.
- Ferraris, T. 1910. Hyphales, Tuberculariaceae, Stilbaceae (in Fl. it. crypt.) 979 p. Rocca S. Casciano.
- G ä u m a n n, E. 1923. Beiträge zu einer Monographie der Gattung Peronospora Corda (in Beitr. zur Kryptogamenfl. der Schweiz: Bd. 5, Heft 4) 360 p. Zürich.
- G ä u m a n n, E. 1959. Die Rostpilze Mitteleuropas (in Beitr. zur Kryptogamenfl. der Schweiz: Bd. XII.) 1407 p. Bern.

- Kochman, J. — Majewski, T. 1970. Phycomycetes: Peronosporales (in Flora Polska Grzyby, IV.) 310 p. Warszawa.
- Lindau, G. 1907–1910. Fungi imperfecti, Hyphomycetes (in RBH's Kr. — Fl.: IX Abt.) 984 p. Leipzig.
- Lindeberg, B. 1959. Ustilaginales of Sweden. Symbolae Bot. Ups. XIV/3. 175 p. Uppsala.
- Lister, A. — Lister, G. 1925. A monograph of the Mycetozoa 296 p. London.
- Majewski, T. 1977. Basidiomycetes: Uredinales I. (in Flora Polska, Grzyby, IX.) 397 p. Warszawa — Kraków.
- Majewski, T. 1979. Basidiomycetes: Uredinales II. (in Flora Polska, Grzyby, XI.) 464 p. Warszawa — Kraków.
- Martin, G. W. — Alexopoulos, C. J. 1969. The Myxomycetes 561 p. Iowa.
- Moesz, G. 1942. Budapest és környékének gombái. Die Pilze von Budapest und seiner Umgebung. 320 p. Budapest.
- Pénzes, A. 1927. Magyarország Cercosporái (Cercosporae Hungariae) Folia Cryptogamica (Szeged, Hungaria) 1/5. col. 287–336.
- Savulescu, Tr. 1953. Monografia Uredinalelor din RPR I, II. 1166 p. Bucuresti.